

## NOTES ON THE NORTHERN PALÆARCTIC BULLFINCHES.

By LEONHARD STEJNEGER.

When, at the request of Mr. Lucien M. Turner, five years ago, I examined the type of *Pyrrhula cassini* (BAIRD) and wrote for his report on the Birds of Alaska an article on the subject, the collection of the United States National Museum was rather deficient in Old World *Pyrrhula*, so that I had to go by descriptions and figures only. Since then the Museum has received many valuable additions to its Palæarectic collection, among which a pair of the Siberian Gray Bullfinch (*Pyrrhula cineracea* CAB.) which prove to me, beyond doubt, that my conclusions arrived at five years ago were quite correct, viz, that the type-specimen of *Pyrrhula cassini* is a female, notwithstanding the statement of the collector to the contrary, and, furthermore, that it is the female of the species which subsequently was named *Pyrrhula cineracea*.

I shall not repeat here the reasons upon which I then based my conclusions; nor will a very detailed comparison be necessary now. Suffice it to say that the type-specimen, U. S. National Museum, No. 49955, collected at Nulato, Alaska, January, 1867, by Prof. W. H. Dall, agrees very well with a female of *P. cineracea*, U. S. National Museum, No. 101978, collected at Onon, Siberia, January 11, 1873, by Dr. B. Dybowski. The general coloration of the plumage both above and underneath is identical, the only difference I can conceive being the faint rosy wash near the tips of the ear-coverts of the former. The type of *P. cassini* lacks the red spot on the outer web of the innermost tertial, a feature characteristic of *P. cineracea*, though our specimen of the latter has a faint indication of this spot. The white spot on the outer pair of tail-feathers is the same in both specimens, but in the Onon specimen it is confined to the inner web, while in that from Alaska it also occupies the whole of the adjoining part of the outer web. In addition the following comparative measurements are appended:

	No. 49955 type of <i>P. cassini</i> ; Nu- lato, January 10, 1867.	No. 101978 ♀ <i>P.</i> <i>cineracea</i> ; Onon, Janu- ary 11, 1873.
	mm.	mm.
Wing .....	90	85
Tail-feathers .....	68	64
Exposed culmen .....	9	10
Tarsus .....	19	18

Since I made the first determination I have also had the opportunity of examining the type of *P. cassini* with a female of Taczanowski's *P. kamtschatica*, but the latter is much clearer gray, and has the band across the wing much broader and whiter.

It may thus be regarded as fairly proven, that the suspicions of Dresser (B. of Eur., IV, p. 100), and Cabanis and Dybowski (J. f. Orn., 1874, p. 40), were well founded, and the name given by Professor Baird in 1869 will consequently take the precedence over that bestowed upon the species by Professor Cabanis three years later. The following synonym will be found to contain most of the important references.

*Pyrrhula cassini* (BAIRD).

- 1836.—*Pyrrhula rubicilla* PALLAS, Zoogr. Ross. As., II, p. 7 (♀ part.).  
 1869.—*Pyrrhula coccinea* var. *cassini* BAIRD, Trans. Chicag. Acad., I, 1869 (p. 316).—DALL & BANNIST., Tr. Chic. Ac., I, 1869, p. 281.  
 1871.—*Pyrrhula cassini* TRISTRAM, Ibis, 1871, p. 231.—FINSCH, Abh. Ver. Bremen, III, 1872, p. 54.—TACZAN., J. f. Orn., 1873, p. 95.—CABAN., J. f. Orn., 1873, p. 315.—B. BR. & RIDGW., H. N. Am. B., I, p. 457 (1874).—DYBOW., J. f. Orn., 1874, p. 39.—DRESSER, B. of Eur., IV, p. 100 (1876).  
 1872.—*Pyrrhula cineracea* CABANIS, Journ. f. Orn., 1872, p. 316.—*Id.*, *ibid.*, 1873, p. 314.—*Id.*, *ibid.*, 1877, p. 223.—DYBOW., J. f. Orn., 1874, p. 40.—SEVERZOW, J. f. Orn., 1875, p. 173.—TACZAN., J. f. Orn., 1875, p. 254.—*Id.*, *ibid.*, 1881, p. 185.—*Id.*, Bull. Soc. Zool. France, 1876, p. 183.—*Id.*, *ibid.*, 1880 (p. 138).—DRESSER, B. of Eur., IV, p. 100 (part) (1876).—HOMMEYER, J. f. Orn., 1879, p. 178.—STEJNEGER, N. Mag. Naturv., 1881, p. 115.—BOLAU, J. f. Orn., 1882, p. 334.

FIGURES.

Trans. Chicag. Acad., I, 1869, pl. xxix, fig. 1.

J. f. Orn., 1874, pl. i.

BAIRD, BREW. & RIDGW., Hist. N. Am. B., I, pl. xxiii, fig. 11 (1874).

For completeness' sake I add below the synonyms of the other species inhabiting the Northern Palearctic Region, the geographical distribution of which is very curious.

In the western portions of Central and Southern Europe the smaller form of the Red-breasted Bullfinch is the breeding bird, while the true *Pyrrhula pyrrhula* is more northern and eastern. The former is very seldom found within the breeding territory of the latter, although I shot a specimen in Western Norway (now in the University Museum in Christiania, Norway), while the large form, in winter, invades the region occupied by *P. europæa*. *P. pyrrhula* seems to go as far east as Transbaikalia, to the river Onon, east of Lake Baikal, Eastern Siberia, where its place is occupied by *P. cassini* (*cineracea*), in which the male is entirely gray without any trace of red. How far east and north this species reaches is not known,\* but it is not improbable that it has a range somewhat resembling that of *Motacilla ocularis* SWINHOE. Nor is the north-eastern limit of *P. pyrrhula* known; all we can say is, that

\* Dresser states that he has examined a specimen of *P. major* [*P. pyrrhula*] from Ussuri, collected by Dybowski. This is probably the same one referred to by Taczanowski, Journ. f. Orn., 1875, p. 254, and may be an accidental visitor only (cf. also Ibis, 1874, p. 463). Both species occur in Kultuk, Darasun, and Dauria. According to Severzow *P. cineracea* [*cassini*] occurs as far west as Turkestan, and Mr. Seebohm kindly informs me that he has specimens from the Altai Mountains and Krasnoyarsk.

there is no record of its having been collected at or near the Asiatic shores of the Pacific or Bering Sea. But in Kamtschatka, again, we find a red-breasted form which, in general coloration, is extremely like the true *P. pyrrhula*, the males only differing by the greater width and the purer white of the alar band. This form, which Taczanowski has named *P. kamtschatica*, is apparently separated from the western red-breasted allies by the interposition of *P. cassini*, which is so remarkably distinct by the entire absence of red in the male.

If we consider only the females we are confronted, however, with a somewhat different problem, for it will be found that the western form, *P. pyrrhula*, represents the brownest phase, and the Kamtschatkan subspecies the grayest extremity, while the female *P. cassini*, intermediate as it appears geographically, is also intermediate in coloration, being grayer than *P. pyrrhula*, but browner than *P. kamtschatica*.

#### *Pyrrhula pyrrhula* (LINN.).

- 1758.—*Loxia pyrrhula* LINN., Syst. Nat., 10 ed., I, p. 171.  
 1789.—*Pyrrhula rubicilla* SCHÄFFER, Mus. Orn., p. 30 (*nec Loxia rubicilla* GÜLDENST., 1775, *nec Coccythraustes r.* GILL, 1781).—PALLAS, Zoogr. Ross. As., II, p. 7 (1826).—HOMER, J. f. Orn., 1879, p. 175.—*Id.*, *Ibid.*, 1880, p. 154.—RADDE, Orn. Caucas., p. 180 (1884).  
 1823.—*Pyrrhula vulgaris* BREHM, Lehrb. Eur. Vög., p. 172 (*nec* TEMM. 1820).—MIDDEND. Sibir. Reise I (p. 149) (1853).—NILSSON, Skand. Fauna, Fögl. 3 ed. I, p. 524 (1858).—RADDE, Reis. Süd. Ost-Sibir. II, (p. 184) (1862).—FINSCH, Zool. Bot. Ges. Wien, 1879, p. 211.—HOMER and TANCRÉ, Mittl. Orn. Ver. Wien, 1883, No. 5, p. 28.—SEEBOHM, Brit. B. Eggs, II, p. 51 (1883).  
 1831.—*Pyrrhula major* BREHM, Handb. Vög. Deutschl., p. 252.—DRESSER, B. of Eur., IV, p. 97 (1876).—NEWTON, Yarr., Brit. B., 4 ed. II, p. 170 (1877).—STEJNEGER, N. Mag. Naturv., 1881, pp. 115, 117.  
 1842.—*Pyrrhula coccinea* DE SELYS, Faune Belge (p. 79) (*nec Emberiza coccinea* GMEL. 1783?).—DEGLAND, Orn. Eur., 1 ed. I, p. 187 (1849).—DEGL. & GERBE, Orn. Eur., 2 ed. I, p. 251 (1867).—TRISTRAM, Ibis, 1871, p. 232.—*Id.*, J. f. Orn. 1871, p. 316.—TACZAN., J. f. Orn., 1873, p. 95.—*Id.*, *ibid.*, 1874, p. 336.—*Id.*, *ibid.*, 1875, p. 254.—*Id.*, Bull. Soc. Zool. France, 1876, p. 182.  
 1849.—*Pyrrhula vulgaris major* TEMM. & SCHLEG., Faun. Jap. Av., p. 91.—SEEBOHM, Br. B. Eggs, II, p. 52 (1883).  
 1854.—*Pyrrhula pyrrhula* LICHTENSTEIN, Nom. Mus. Berol., p. 48.  
 1871.—*Pyrrhula rubicilla*  $\beta$ . *coccinea* DUBOIS, Consp. Av. Eur., p. 18.  
 1873.—*Pyrrhula cassini* TACZANOWSKI, J. f. Orn., 1873, p. 95 (*nec* BAIRD).  
 1877.—*Pyrrhula linnei* MALM, Göteborg. och Bohusl. Fauna, p. 194.

#### *Pyrrhula pyrrhula europæa* (VIEILL.).

- 1781.—*Coccythraustes rubicilla* GILL, Rom. Orn., I, p. 158 (*nec Loxia rubicilla* GÜLD. 1775).—*Pyrrhula rubicilla* BONAP., Consp. Av., I, p. 525 (1851) (*nec* SCHÄFFER, 1789).—TRISTRAM, Ibis, 1871, p. 232.—*Id.*, J. f. Orn., 1871, p. 316.  
 1787.—*Loxia pyrrhula* LATHAM, Suppl. Synops., I, p. 285 (*nec* LINN. 1758).  
 1788.—? *Emberiza coccinea* GMELIN, Syst. Nat., I, p. 873.  
 1816.—*Pyrrhula europæa* VIEILL., N. Diet. d'H. Nat., IV, p. 286.—LEACH, Sys. Cat. M. B. Brit. Mus., p. 13 (1816).—DEGLAND, Orn. Eur., 1 ed., I, p. 185 (1849).—DRESSER, B. of Eur., IV, p. 101 (1876).—NEWTON, Yarr., Brit. B., 4 ed. II, p. 166 (1877).—STEJNEGER, N. Mag. Naturv., 1881, p. 113.

- 1816.—*Pyrrhula rufa* KOCH, Bair. Zool., I, p. 227.  
 1820.—*Pyrrhula vulgaris* TEMM., Man. d'Orn., 2 ed., I, p. 330.—DE SELYS, Faune Belge (p. 78) (1842).—DEGLAND and GERBE, Orn. Eur., 2 ed., I, p. 250 (167).  
 1831.—*Pyrrhula germanica* BREHM, Handb. Vög. Deutschl., p. 252.—HOMER, J. f. Orn., 1879, p. 177.  
 1831.—*Pyrrhula peregrina* BREHM, Handb. Vög. Deutschl., p. 253.—HOMER, J. f. Orn., 1880, p. 154.  
 1839.—*Pyrrhula pileata* MACGILL., Hist. Brit. B., I, p. 407.  
 1849.—*Pyrrhula vulgaris minor* TEMM. & SCHLEG., Faun. Jap. Av., p. 91.  
 1855.—*Pyrrhula minor* BREHM, Naumannia, 1855, p. 276.  
 1856.—*Pyrrhula coccinea a rubicilla* BONAP., Cat. Parzud., p. 4.

*Pyrrhula pyrrhula kamtschatica* (TACZ.).

- 1826.—*Pyrrhula rubicilla* PALLAS, Zoogr. Ross. As., II, p. 7 (part), (*nec* GÜLD.).—KITTLITZ, Denkwürd., I, p. 322 (1858).  
 1882.—*Pyrrhula kamtschatica* TACZANOWSKI, Bull. Soc. Zool. France, 1882, p. 395. Journ. f. Orn., 1884, p. 408 (1885).  
 1883.—*Pyrrhula kamtschatkensis* DYBOWSKI, Bull. Soc. Zool. France, 1883, p. 367.  
 1884.—*Pyrrhula rubicilla kamtschatkensis* DYBOW. & TACZAN., Bull. Soc. Zool. Fr., 1884, p. — Extr., p. 2.  
 1885.—*Pyrrhula pyrrhula kamtschatica* STEJNEGER, Res. Orn. Explor. Kamtch., p. 322.  
 1887.—*Pyrrhula vulgaris kamtschatica* SEEBOHM, Ibis, 1887, p. 101.

Since compiling the Synopsis of Kamtschatkan birds (*l. c.*), I have received from my friend Capt. J. E. Hunter four specimens of the present bird, three males and one female. Considering the apparent isolation of its habitat it is rather astonishing to find it so closely allied to *P. pyrrhula*. The differentiation, however, is like that of most of the peculiar Kamtschatkan forms, the color being purer and the white more extended, in this particular case especially on the wing-band. The red of the under parts can be matched by Scandinavian specimens, but the ear-coverts show more of that peculiar silvery gloss so highly developed in the Japanese species, *P. griseiventris*. The females differ more from the western form, the back being nearly a pure cinereous with the faintest possible wash of brownish on the lower back. In both sexes the red spot on the inner tertial is present, though on an average somewhat paler than in true *P. pyrrhula*. In size the present form appears to be intermediate between *P. pyrrhula* and *P. europaea*, as evidenced by the following

*Measurements.*

U. S. Nat. Mus. No.	Collector.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Ex-posed culmen.	Tar-sus.	Middle toe with claw.
110011	Hunter ...	(♂) ad.	Petropaulski, Kamtsch.	.....	84	70	9	18	18
110012	...do....	(♂) ad.	...do....	.....	92	69	9.5	19	.....
110013	...do....	(♂) ad.	...do....	.....	88	67	10	18	19
110014	...do....	(♀) ad.	...do....	.....	87	65	9	18	.....

*Pyrrhula griseiventris* LAFR.

- 1835.—*Pyrrhula vulgaris* TEMMINCK, Man. d'Orn., 2 ed., III, p. 248 (part).  
 1841.—*Pyrrhula griseiventris* LAFRESNAYE, Rev. Zool., 1841, Aug., p. 241.—SWINHOE, P. Z. S., 1871, p. 3-6.  
 1844.—*Spermophila griseiventris* GRAY, Gen. B., II, p. 386.  
 1849.—*Pyrrhula orientalis* TEMM. & SCHLEG., Faun. Jap. Aves, p. 91.—BONAPARTE, Consp. Av., I, p. 525 (1850).—BLAKIST., Ibis, 1862, p. 328.—*Id.*, Chrysanth., 1883, Febr., p. —. *Id.*, Am. List B. Jap., p. 64 (1884).—WHITELY, Ibis, 1867, p. 203.—SWINHOE, Ibis, 1874, pp. 160, 463.—TACZAN., J. f. Orn., 1876, p. 200.—*Id.*, Bull. Soc. Zool. France, 1876, p. 183.—BLAKIST. & PRYER, Ibis, 1878, p. 246.—*Id.*, Tr. As. Soc. Jap., VIII, 1880, p. 235.—*Id.*, *ibid.*, X, 1882, p. 176.—BOLAU, J. f. Orn., 1880, p. 126.—*Id.*, *ibid.*, 1882, p. 335.—JOUY, Proc. U. S. Nat. Mus., VI, p. 293 (1883).  
 1860.—*Pyrrhula vulgaris* var. *orientalis* SCHRENCK, Reis. Amurl., I, p. 291 (1860).—PRZEWALSKI, Putesch. Ussuri, (No. 53) (1870).  
 1876.—*Pyrrhula cineracea* DRESSER, B. of Eur., IV, p. 100 (part).  
 1882.—*Pyrrhula rosacea* SEEBOHM, Ibis, 1882, p. 371. Journ. f. Orn., 1884, p. 409 (1885).—BLAKIST., Chrysanth., 1882, p. 474.—*Id.*, *ibid.*, 1883, Jan., p. 36.—*Id.*, *ibid.*, Feb., p. —. —*Id.*, Amend. List B. Jap., p. 64 (1884).  
 1887.—*Pyrrhula orientalis rosacea* SEEBOHM, Ibis, 1887, p. 101.  
 “*Pyrrhula pyrrhuloides* TEMM.”, Mus. Acad. Philada.

## FIGURES.

TEMMINCK et SCHLEGEL, Fauna Japonica, Aves, pl. liii.

GOULD, B. As., pt. V, pl.—(1853).

## Measurements.

Current number.	Museum and No.	Collector and No.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Exposed culmen.	Tarsus.
1	U. S. Nat. 110199	Jouy, 1630	(♂) ad.	Nikko, Hondo	.....	83	64	9.5	17
2	U. S. Nat. 91339	Jouy, 812	♂ ad.	Tate Yama, Hondo	Nov. 28, 1882	80	59	10	17
3	Christiania, N	Petersen, 4	♂ ad.	Yamato, Kiusiu	Dec. 13, 1885	83	63	9	17
4	U. S. Nat. 95390	Ota, Bl. 1995	♂ ad.	Tokio, Hondo	.....	83	59	9.5	17
5	U. S. Nat. 110200	Jouy, 1631	(♂) ad.	Nikko, Hondo	.....	83	63	10	18
6	U. S. Nat. 96388	Blakist. 1057	♂ ad.	Hakodadi, Yezo	Feb. 15, 1873	85	63	9.5	18
7	U. S. Nat. 110201	Jouy, 1632	(♂) ad.	Nikko, Hondo	.....	84	62	9	.....
8	U. S. Nat. 91340	Jouy, 815	♂ ad.	Tate Yama, Hondo	Nov. 28, 1882	83	60	9	18
9	U. S. Nat. 110202	Jouy, 1633	(♂) ad.	Nikko, Hondo	.....	83	60	10	.....
10	U. S. Nat. 96389	Blakist. 1060	♂ ad.	Hakodadi, Yezo	Feb. 16, 1873	85	66	9	17
11	U. S. Nat. 96391	Ota, Bl. 1996	♂ ad.	Tokio, Hondo	.....	81	61	10	18
12	U. S. Nat. 110203	Jouy, 1634	(♂) ad.	Nikko, Hondo	.....	86	67	10	19
13	U. S. Nat. 91342	Jouy, 875	♂ ad.	Tate Yama, Hondo	Dec. 17, 1882	83	64	9.5	.....
Average of 13 males .....						83	62	9.5	17.5
14	U. S. Nat. 91341	Jouy, 816	♀ ad.	Tate Yama, Hondo	Nov. 28, 1882	83	61	9	17.5
15	Christiania, N	Petersen, 27	♀ ad.	Shimbon, Kiusiu	Feb. 14, 1886	84	60	9.5	18

I have before me, as will be seen by the above table, 13 male Japanese Bullfinches, which, for convenience' sake, I shall designate in the following by their current numbers. Arranged in a row, from No. 1 to No. 13, they form an uninterrupted series from the most extreme *P. rosacea* to the grayest *P. griseiventris*, the intergradation being in every respect perfect. From No. 1 to No. 10 the red “flush” is visible on the *under parts*,



grading insensibly from a somewhat grayish "burnt carmine" down to a just perceptible red wash over the deep cinereous gray. On the back the burnt carmine tint is deeper in No. 2 than in No. 1, and from these gradually fading until No. 7, which shows the last trace of red on the upper parts.

It is impossible for me to draw a line anywhere in this series, but, judging from Mr. Seeborn's original description (Ibis, 1882, p. 371), where he particularly enlarges on the red color of the back, I presume that he would refer the first six ones to *P. rosacea*. If we now look at the localities given in the above table, it will be seen that among the six first numbers are specimens from Kiusiu, Hondo, and Yezo, consequently, from the three principal islands and from both sides of "Blakiston's Line;" it is also clear that true *P. griseiventris* occurs both south and north of that line.

It may be said, however, that the above series proves but little geographically, since all the specimens are probably winter birds; that there would be nothing surprising in finding *P. griseiventris* migrating south to Hondo during the cold season; and that even the appearance of a true and typical *P. rosacea* from Hakodadi at that time of the year is of little importance.

I find, however, in the manuscript notes which Captain Blakiston kindly placed at my disposal, several remarks which are of some consequence in the present connection, for it is evident that No. 6 of the above table (Blakiston's No. 1057) is by no means the only specimen from Yezo with red on the back. Here are Captain Blakiston's remarks: "No. 1057 [the one in U. S. National Museum just alluded to], ♂, February, Hakodate, *flush on back*, represented in Hakodate Museum by No. 772, Hakodate, October, which has *slight flush on back*, and No. 1952, Hakodate, May, *good deal flush on back*." Judging from the wording, the latter specimen must be something like No. 2 of my table above, and having been obtained at Hakodadi in May, it goes a long way to prove that locality has nothing to do with the presence or absence of red on the back or its greater or lesser intensity generally.\*

I have carefully gone over my whole series in order to ascertain whether there might not be any other characters possibly distinctive of

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\* Since the above was submitted for publication I learn from an article in the Ibis, 1887, p. 101, that Mr. Seeborn, whose type specimens of *P. rosacea* came from Yokohama, now considers this bird peculiar to Yezo and the opposite portion of the Siberian mainland. Unfortunately I have only one very gray *P. griseiventris* from Hakodadi to disprove this, and Blakiston's manuscript notes do not assist me in this case, except that he mentions a Sapporo specimen without "flush" on the back. That Blakiston's notes prove nothing in this respect is due to the fact, however, that he only made notes in regard to the red specimens from Yezo, and not to the common gray ones, which seem to be much more common. He who for twenty years had collected in Yezo, was under the same impression as I, that *P. rosacea* was intended for a supposed southern race. Nothing could prove more conclusively how worthless is the claim of *P. rosacea* to be regarded otherwise than a phase of the gray bird.

two races, but have so far failed. It will be seen that there are only two females in the collection, and inasmuch as the females of *P. pyrrhula* and its races and nearest allies seem to show greater differences than the males, there might still be some doubt in regard to the Japanese species, but in describing *P. rosacea* Mr. Seebohm informs us (*l. c.*) that the females of the latter "do not apparently differ from those of *P. orientalis*" [= *P. griseiventris*].

Messrs. Blakiston and Pryer (*ll. cc.*) have already shown that there is no difference in size, and my measurements fully substantiate their conclusions.

Mr. Dresser (B. of Eur., IV, p. 100) speaks of having "examined several specimens [of *P. cineracea* = *cassini*] in the collection of Mr. R. Swinhoe," from Japan, "which are as a general rule a little more dull in general coloration than those from Siberia." In this connection it may be useful to refer to Swinhoe's own remarks (*Ibis*, 1874, p. 463): "On examining these specimens [a pair received from Captain Blakiston] lately, I observed that the male was typical both in size and color, whereas the female was large, and has a wash of white along the web on each side of the stem of each outer tail-feather. From this last character I argued that I had from Hakodadi a female *P. cassini* BAIRD." He also mentions having a female from the Kuriles and another one from Hakodadi, collected by Whitely, both similarly marked. This white mark has apparently induced Dresser to regard them as distinct and belonging to *P. cassini* or *cineracea*. It is now well known, however, that this character is utterly worthless, and I have, moreover, the assurance of Mr. Seebohm, who is the fortunate possessor of the Swinhoe collection, that "the alleged skins from Japan are females of *P. orientalis*" (S. in litteris).\* The white streak on the outer tail-feathers is less common in *P. griseiventris* than in the more northern species, but of the specimens included in my table above it is present in Nos. 4, 8, 14, and 15.

I am, therefore, compelled to accept the conclusion arrived at by Messrs. Blakiston and Jouy (*Chrysanth.*, 1883, Feb., p. —, Amend. List B. Jap., 1884, pp. 64, 81, and *Proc. U. S. Nat. Mus.*, VI, 1883, p. 293) that *P. rosacea* is not a valid species or subspecies. Whether it is "a highly developed stage of plumage of *P. orientalis*," in other words, whether the gray individuals ever assume the red "flush," I do not know, but I am inclined to doubt it. It may be a kind of "dichromatism," as in the owls, and probably also in *Acanthis* and *Carpodacus*. Mr. Seebohm lays much stress on the "fact that neither of these species [*P. orientalis* and *P. major*] has any trace of red on the back," but I have specimens before me both of *P. pyrrhula* (U. S. Nat. Mus. No. 98013, ♂, Bergen, Norway = *P. major*) and of *P. europaea* (No. 96601, ♂, Woolwich, England), which have a decided red "flush" on the back, and Naumann refers to similarly colored specimens as very old birds (*Vög. Deutschl.*, IV, p. 386). This tendency of the red color to spread over

\* Cf. his recent remarks, *Ibis*, 1887, pp. 100, 101.

the plumage seems, however, more common in the Japanese than in the European birds, and is carried to such an extreme that in Nos. 1 and 2 of my table it also invades the white of the rump with a most delicate tinge of light rosy pink.

No. 1 is even more remarkable, for in this the excess of red color goes so far as to break down a character which has always been relied upon as distinctive of the Japanese species, viz, the absence of red on the inner tertial. In this bird the red spot on this feather is very distinct and large, and even the large upper wing-coverts are edged exteriorly with red.

*Pyrrhula kurilensis* SHARPE.

1859.—*Pyrrhula orientalis* MIDDENDORFF, Mém. Acad. Imp. St. Pétersb. Sc. Nat., VIII. p. 124.—SWINHOE, Ibis, 1874, p. 463.—BLAKIST. & PRYER, Tr. As. Soc. Jap., X, 1882, p. 176 (part).

1887.—*Pyrrhula kurilensis* SHARPE, fide Seebohm, Ibis, 1887, p. 101.

1887.—*Pyrrhula orientalis kurilensis* SEEBOHM, Ibis, 1887, p. 101.

No specimen of this, the latest discovery among the *Pyrrhulæ*, has yet come under my observation, but I am indebted to Mr. R. B. Sharpe for the following account of this species, or subspecies, which he had the kindness to communicate to me in a letter dated November 12, 1886:

“*Adult male*.—Similar to *P. orientalis*, but much paler in color, being pale ashy-brown above, instead of blue-gray, and pale drab-brown below, instead of bluish gray, but faintly tinged with rosy on the breast. Total length, 5.3 inches [135<sup>mm</sup>]; culmen, 0.45 [11.5]; wing, 3.5 [89]; tail, 2.6 [66]; tarsus, 0.7 [18].

“*Adult female*.—Not to be distinguished from the female of *P. orientalis*. Total length, 6 inches [152<sup>mm</sup>]; culmen, 0.4 [10]; wing, 3.25 [83]; tail, 2.45 [62]; tarsus, 0.7 [18] (*Mus. H. Seebohm*).

“We have a male from the Kurile Islands and Seebohm has a pair collected by Wossnessensky.”

Wossnessenski, according to Middendorff, found the Bullfinch on Urup during May and August, and according to Blakiston and Pryer it is “very numerous on Eturop in September.” It may be looked for in Yezo during the winter months.\*

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\* In order to bring the subject up to date (of proof correction) I may add, that Mr. Seebohm in his article in the Ibis, 1887, p. 101, has separated an eastern form of *P. cineracea* as *P. c. pallida*. It is distinguished by having the wing-band gray, the sides of the head almost white, and by being paler on the under parts generally. This form hails from the Altai Mountains and from the valley of the Ussuri.